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A NEW SPECIES OF *PECTINARIA*

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ABSTRACT

A new species of *Pectinaria* Haworth is described from the Calvinia district.

UITTREKSEL

'N NUWE *PECTINARIA* SPESIES

'n Nuwe *Pectinaria* Haworth spesies vanaf Calvinia-distrik, word beskryf.

INTRODUCTION

Pectinaria, one of the smaller genera in the Stapelieae, is not known to occur outside the Cape Province. North of the Ceres-Karoo it is represented by *P. saxatilis* N.E.Br. around Vanrhynsdorp and by *P. articulata* Haw. var *namaquensis* N.E.Br. in the Springbok district. A few isolated records exist of *P. saxatilis* from the Calvinia-Loeriesfontein area.

Pectinaria exasperata Bruyns, sp.nov.

Caules aliquando conferti aggregati vel repentes sub terram, tum surgentes supra terram, partes sub terram albae, sine angulis manifestis, 5 ad 10 mm crassae, partes supra terram erectae, 10 ad 15 mm crassae apud planitiem terram, coartantes ad culminem rotundatum, armatae parvis dentibus, glabri; *flores* partim vel omnino subterranei; *pedicelli* glabri, 2 ad 5 mm longi cum floribus; *sepala* acuta, glabra; *corolla* 18 ad 20 mm longa; tubus ater purpureo-ruber basi, cetero pallidus puniceus, 10 ad 12 mm longus, coartans paululum prae initio lobis, papillatus intus cum prominentibus papillis; lobi aliquando conjuncti extremis, 7 ad 8 mm longi, 3 mm lati basi, papillati prope basim; *corona lobi exteriores* minutes, bidentates; *lobi interiores* 2 mm longi, atri purpureo-rubri.

Type material: CAPE—3119 (Calvinia): about 20 miles north of Calvinia (—BC), *Bruyns 1345* (NBG, holo.).

Stems sometimes in a dense clump or else creeping underground from a central group of stems for about 40 mm or longer, then emerging above surface. Underground portion white, without obvious angles, 5–10 mm thick, above-ground portion erect, 10–40 mm long, dull grey-green, distinctly 4-angled, 10–15 mm thick at ground level, tapering (often abruptly) to a rounded top, armed with

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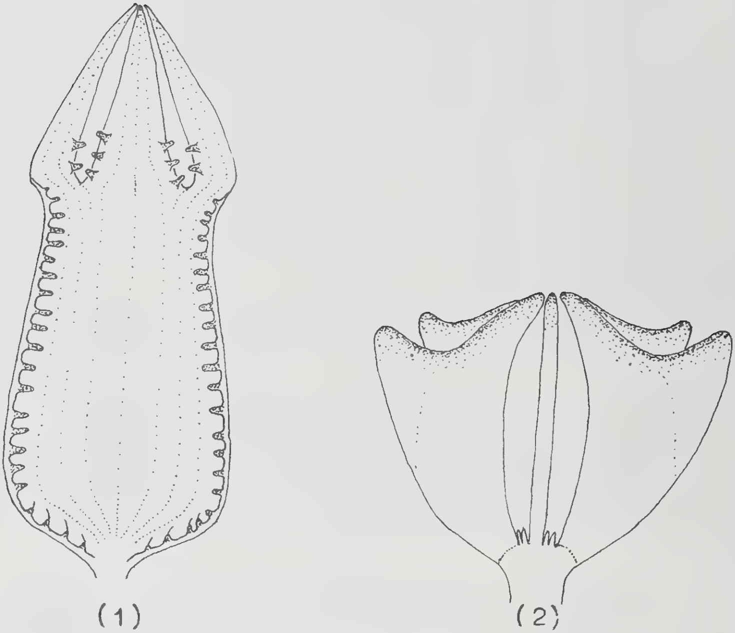

Fig. 1.
Pectinaria exasperata:
(1) Corolla ×4,5.
(2) Staminal column ×18.

small sharp teeth on the angles, glabrous; *flowers* partially or entirely subterranean, arising in groups from a subterranean peduncle up to 10 mm long; *pedicels* glabrous, 2–5 mm long when with flowers, elongating to 10 mm after fertilisation. Before seed production elongate to 20–25 mm (coming just above soil surface) finally lengthening to 50 mm when follicles develop; *sepals* 3 mm long, 1 mm broad at base, acute, glabrous; *corolla* 18–20 mm long; tube cylindric-ovoid with deep purple-red base, the rest very light pink, 10–12 mm long, 4–7 mm broad at widest, narrowing slightly to 4–6 mm just below base of lobes, papillate within with prominent papillae covered with sub-globose, round-topped spicules, papillae becoming smaller towards base of tube, those in purple-red basal portion of tube each topped with a single hair up to 1 mm long; lobes 7–8 mm long, 3 mm wide at base, with a few papillae near base, very light pinkish-grey, with 5 intermediate decurved lobes up to 1 mm in length; *outer corona lobes* minute, bifid; *inner corona lobes* 2 mm long with a dorsal projection 1 mm in length, incumbent on anthers and meeting above stigmatic surface, dark

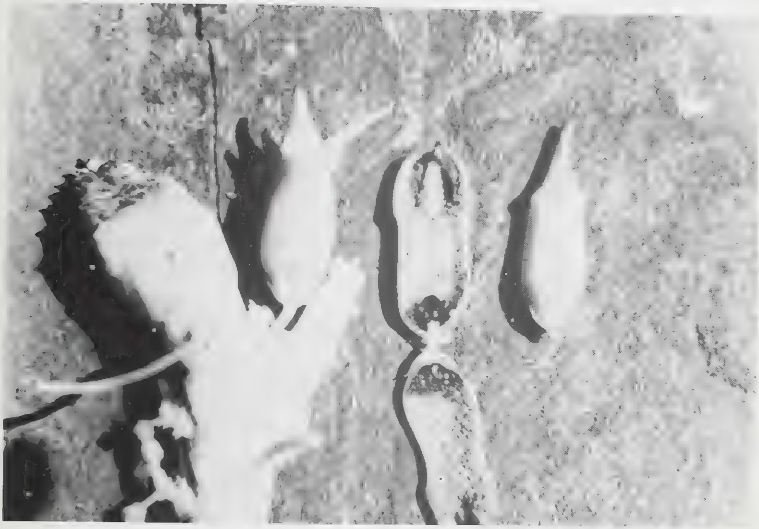

FIG. 2.
Pectinaria exasperata.

purple-red; *follicles* 100–120 mm long, with purple stripes on a light yellow background; *seeds* 4 mm long, 2 mm broad, with papillate margin, upper and lower surfaces rugose.

DISCUSSION

The structure of the inner corona lobes and the 4-angled stems place *P. exasperata* in the group within the genus *Pectinaria* consisting of *P. pillansii* N.E.Br., *P. saxatilis* N.E.Br., *P. stayneri* Bayer and *P. breviloba* R. A. Dyer. The partially to completely subterranean flowers are reminiscent of *P. pillansii*, a species further characterised by thick, decurved, intermediate corolla lobes. This latter feature is present to a much lesser degree in *P. exasperata*, but is not constant in that some flowers collected had very small and insignificant intermediate lobes. However, the erect, quadrangular above-ground portion of the stem and papillate corolla separate it from *P. pillansii* as well as from *P. saxatilis* and *P. stayneri*.

The growth habit of *P. exasperata* is very similar to that of *P. breviloba*. Both species creep underground with erect stem ends protruding at intervals. However, stems of *P. exasperata* are much thicker. As far as the flowers are concerned these two species differ in shape and size of the corolla and in colour. The inner corona lobes with considerable dorsal processes are similar to those of *P. saxatilis* as recorded by Bayer and Plowes (1975) from Vanrhyn's Pass. In size they are similar to those of *P. saxatilis* from Vanrhyn's Pass as well as to those of *P. pillansii* and *P. breviloba*.

The name *P. exasperata* is adopted on account of the remarkably papillate inner surface of the corolla, visible even to the naked eye, a feature not found in any other member of the group to which it belongs.

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